

Amendment to the Claims:

1. (Previously Presented) An imaging communication system for communicating between an imaging workstation, from which imaging protocols are conducted and at which diagnostic images are displayed, and one or more medical professionals, the system comprising:

5 the workstation including:

an input device by which a user selects and addresses one or more medical professionals and selects diagnostic image representations to be sent to the one or more selected medical professionals;

10 a unit which formats the at least one selected medical professional address and the selected diagnostic image representations into a wireless transmission format and wirelessly transmits the selected electronic image representation with the selected medical professional address;

15 a plurality of remote units, each remote unit including:

a receiver which receives wireless transmissions from workstations and from other remote units;

20 an address reader connected with the receiver which address reader examines each received wireless transmission for a corresponding preselected address;

a video processor connected with the receiver to, in response to the address reader finding the corresponding preselected address in the received wireless communication, convert a diagnostic image portion of the received wireless transmission into an appropriate format for human-readable display; and

25 a display device on which the diagnostic image is displayed in human-readable format.

2. (Previously Presented) The system as set forth in claim 1, the remote units are portable units and each communicates wirelessly with the workstation and the other portable units and each portable unit further includes:

an input unit through which the medical professional associated with
5 the portable unit inputs (1) address of other portable units, (2) instructions to transfer the diagnostic image to an addressed portable unit, and (3) at least one of voice and text communications such that the medical professional associated with the portable unit can confer with medical professionals associated with other portable units and/or the workstation about the diagnostic image.

3. (Previously Presented) The system as set forth in claim 2, wherein the portable units include at least one of notebook computers and tablet personal computers which have sufficient resolution that the associated medical professional can determine if the diagnostic image is satisfactory for diagnostic
5 purposes.

4. (Previously Presented) The system as set forth in claim 2, further including:

a diagnostic scanner disposed in a scan room adjacent the imaging workstation, the imaging workstation communicating the imaging protocols to the
5 diagnostic scanner to control the diagnostic scanner during an imaging process of a subject in the diagnostic scanner to generate the diagnostic image.

5. (Previously Presented) The system as set forth in claim 4, wherein the imaging workstation addresses and communicates the diagnostic images of the subject in the diagnostic scanner to the portable unit associated with a one of the medical professionals responsible for reviewing the diagnostic images of the subject and the portable unit input unit further includes:

at least one of a microphone, a touch screen, a keypad, and a joystick or mouse by which the one of the medical professionals wirelessly sends communications to an operator of the imaging workstation.

6. (Previously Presented) The system as set forth in claim 4, wherein the portable unit input unit includes a microphone and formatting electronics which format audio information from the microphone into an appropriate format for wireless transmission such that the one of the medical professionals associated with the portable unit that received the diagnostic images can forward the diagnostic images to other medical professionals and verbally discuss the diagnostic images with the other medical professional.

7. (Currently Amended) The system as set forth in claim 2, wherein the workstation further includes:

a receiver which receives wireless communications from the portable units;

5 an address reader which reads an address portion of the received wireless communications and ~~determining~~determines whether the received address portions match a preselected workstation address; and

a converting unit which converts an input information portion of the received wireless communication whose corresponding address portion matches the
10 preselected workstation address into at least one of a human-readable and hearable format.

8. (Previously Presented) An imaging communication system for communicating between an imaging workstation, from which imaging protocols can be conducted and at which diagnostic images can be displayed, and one or more medical professionals, the workstation being disposed adjacent a scan room, the
5 system comprising:

a means for selecting and addressing one or more medical professionals;

a means for selecting electronic image representations to be sent to the one or more selected medical professionals;

10 a means for formatting the at least one selected medical professional
address and the selected electronic image representations into a wireless transmission
format; and

 a diagnostic scanner disposed in the scan room;

 a patient support for supporting a patient in the diagnostic scanner;

15 an electronic camera disposed in the scan room to view the patient on
the patient support, the electronic camera being connected with the formatting means
to format electronic pictures from the electronic camera for wireless communication
to a selected portable unit;

 a plurality of portable units, each unit including:

20 a monitor means for generating the human-readable
display,

 a remote receiving means for receiving wireless
transmissions at remote locations,

 an address reading means connected with the receiving
25 means for examining each received wireless transmission for a
corresponding preselected address, and

 a video processing means connected with the remote
receiving means for, in response to the address reading means finding
the corresponding preselected address in the received wireless
30 communication, converting an electronic image portion of the received
wireless transmission into an appropriate format for human-readable
display.

9. (Previously Presented) The system as set forth in claim 8,
further including:

 an electromechanical control means for adjusting at least one of a field
of view, focus, and direction of the electronic camera, the electromechanical control
5 means being connected with a receiving means and a workstation address recognition
means to receive control signals originating with the input means of the portable unit.

10. (Previously Presented) The system as set forth in claim 1, wherein the formatting unit is connected with a hospital based network, which includes wireless transmission units.

11-14. (Cancelled)

15. (Previously Presented) The system as set forth in claim 1, further including:

a diagnostic scanner which conducts a diagnostic scan of a patient positioned in the diagnostic scanner under control of the workstation to generate
5 diagnostic image information;

a reconstruction processor which reconstructs the generated diagnostic information into diagnostic images.

16-21. (Cancelled)

22. (Previously Presented) An imaging scanner communication system comprising:

a diagnostic scanner disposed in a hospital which generates diagnostic images of a patient disposed in the diagnostic scanner;

5 an optical camera disposed adjacent the diagnostic scanner to generate electronic optical images of the patient disposed in the diagnostic scanner;

a workstation which facilitates wireless data transfer between diagnostic scanner operating personnel and one or more hospital radiologists moving around the hospital and remote from the workstation, the workstation receiving the
10 diagnostic images from the diagnostic scanner and the optical images in electronic format and formatting the images for wireless transmission;

a wireless communication unit coupled to the workstation which wirelessly transmits patient information and the diagnostic images and the optical images to a selected one of the hospital radiologists; and

15 a plurality of portable units each carried by one of the hospital radiologists, each portable unit including:

20 a wireless communications unit which each portable
unit receives the patient information, diagnostic images and optical
images wirelessly transmitted from the workstation and addressed to it
and wirelessly transmits instructions input on an input unit to the
workstation, the instructions including instructions to the diagnostic
scanner operating personnel regarding the patient in the scanner
including instructions for acceptance of the diagnostic images and
instructions to re-scan the patient in the diagnostic scanner, each
25 portable unit further including a display on which the diagnostic and
optical images are displayed.

23. (Previously Presented) The system as set forth in claim 1,
wherein the patient has been injected with a contrast agent and the workstation and
the remote units further include:

5 transmitters and receivers for at least one of voice and text
communications which wirelessly transmit voice and/or text communications between
the workstation and the remote units such that while holding the patient in the
diagnostic scanner, the diagnostic images are transferred to one of the remote units
and displayed to a medical professional; and

10 such that after analysis of the human-readable display, the transmitters
and receivers wirelessly transmit voice and/or text instructions to the workstation to
one of: (1) release the patient and (2) conduct further diagnostic scans while the
contrast agent is still in the patient.

24. (Previously Presented) The system as set forth in claim 1,
further including:

5 a video camera which optically images the patient in the diagnostic
scanner to generate electronic optical images of the patient, the workstation
formatting unit formats the optical video images and a selected medical professional's
address into format for wireless transmission to the remote unit associated with the
selected medical professional.

25. (Currently Amended) The system as set forth in ~~claim 17~~
claim 24, wherein the remote units further include:

an input device which wirelessly controls a field of view of the video
camera which generates the optical video images.

26. (Previously Presented) The system as set forth in claim 1,
further including:

a patient records database;

5 a wireless transmitter connected with the database which, in response
to the instructions from one of the remote units, wirelessly transmits patient records to
the one remote unit.

27. (Previously Presented) The system as set forth in claim 1,
wherein the remote unit includes a wireless transmitter and the workstation includes a
wireless receiver such that after reviewing the diagnostic images an approval of the
diagnostic images is wirelessly sent to the workstation and the patient in the scanner is
5 released.

28. (Previously Presented) The system as set forth in claim 1,
wherein the remote unit includes a wireless transmitter and the workstation includes a
wireless receiver such that after analyzing the diagnostic image on the remote unit
display device, instructions are wirelessly sent to the workstation to control the
diagnostic scanner to generate additional diagnostic images of the patient.

29. (Previously Presented) The system as set forth in claim 5,
wherein the communications from the medical professionals to the operator include:

messages approving the diagnostic images and authorizing release of
the subject; and

5 messages requesting that the operator control the diagnostic scanner to
perform another imaging process with another protocol.

30. (Previously Presented) The system as set forth in claim 8,
wherein the diagnostic scanner includes a diagnostic scanner and the image
representations include diagnostic images of the patient, such that the diagnostic
images and the electronic pictures are both communicated to the selected medical
5 professionals and wherein the portable units further include:

an input means for selecting one or more of other ones of the medical
professionals and an operator of the workstation and communicating the diagnostic
images and/or the electronic pictures to selected other medical professionals and for
sending messages to the selected other medical professionals and the operator such
10 that selected medical professionals can confer on the diagnostic images and/or the
electronic pictures and provide instructions to the operator to control the diagnostic
scanner to generate additional diagnostic images.